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DISCLOSURES UNDER CONSIDERATION

Philip Morris Incorporated
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25 January 1980

Code 1 - Offensive/Urgent
Code 2 - Defensive/Urgent
Code 3 - Offensive/Normal
Code 4 - Defensive/Normal

785 IMPROVED DILUTION UNIFORMITY OF VENTED FILTER TIP CIGARETTES

L. Meyer and W. Houck, Jr./R&D/New Cigarette Products Division/Meyer/
Gannon

Wrapless acetate filter plugs are proposed for both vented and unvented filter cigarettes. For the unvented filters, the advantage is simplification and elimination of problems with the wrap, hence increased efficiency of production. For ventilated filters, more uniform dilution and a requirement of fewer vent holes in the tipping paper are seen.

Sarofeen
INACTIVE CODE 1

8-16-77 Disclosure received.
2-78 Inventor Houck conducting tests to develop patent data.
11-20-79 Talked with Leo Meyer and expect decision on whether to proceed.
12-11-79 Inactivated per Willie Houck.

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0000049509

787 USE OF PHENOLIC GLYCOSIDES AS FLAVORANTS IN TOBACCO

E. Sanders/R&D/Chemical Research Division/Sanders/Osdene

Phenolic glycosides useful as flavorants in smoking materials are disclosed. on pyrolysis, the phenol flavorant is released to flavor the smoke. Advantageous in that the compounds are odorless and reduce pack aroma.

D&O/Hutcheson

CODE 4

7-21-77 Disclosure received.

9-19-78 Disclosure to D&O for evaluation.

10-78 Search received from D&O.

3-79 Further development work being done by inventor.

9-79 Synthetic routes are being developed according to the inventor.

1-25-80 Inventor believes sufficient information is available to prepare application.

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795 MICROWAVE/GAS CHROMATOGRAPHY

D. Watson/R&D/Analytical Division/Bourlas/Osdene

Microwave energy source selectively vaporized components for further separation by GC.

Related to 794

Blish

CODE 4

10-24-77 Disclosure received.

2-78 Search sent to inventor for review.

12-78 Inventor has asked that this case not be prosecuted pending his further investigations of the method, possibly should be inactivated.

3-79 Inventor preparing new disclosure.

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0000049510

796 BIOSYNTHESIS OF A TOBACCO FLAVORANT OR TOBACCO SMOOTHER--
FERMENTED TOBACCO

B. Semp, D. Teng, and S. Tenhet/R&D/Biomaterials Science Group/O'Donohue/
Lowitz/Farone

Biosynthesis of tobacco fermentation flavorants by microorganisms. Advantages include use on unfermented tobacco and low delivery cigarettes. In addition, it is more rapid than conventional tobacco fermentation procedures.

Hutcheson

CODE 1

10-28-77 Disclosure received.

8-78 Preliminary search completed on PM data base.

3-79 Experimental work underway.

9-6-79 Additional art found on "accelerated fermentation" and forwarded to inventors. Similar concepts disclosed in US 516778 and 1262622.

9-10-79 Memo to inventors reviewing prior art.

9-79 Search requested from outside firm.

10-15-79 Search received; results under evaluation; report to be written.

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800 COLOR AND ODOR REMOVAL FROM UNCURED TOBACCO

B. Semp and D. Teng/R&D/Biomaterials Science Group/O'Donohue/Lowitz/
Farone

Green tobacco is treated with a lipase enzyme to remove lipids. The green odor is eliminated and smoking quality improved.

Hutcheson

CODE 2

11-10-77 Disclosure received.

8-78 Preliminary search completed on PM data base.

3-79 Experimental work completed.

9-11-79 Search requested from outside firm.

10-15-79 Search received; results under evaluation; report to be written.

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0000049511

816 COPOLYMER POSSESSING WATER AND/OR ETHANOL SOLUBILITY FOR MAKING SMOKING COMPOSITIONS

W. Johnson, Jr. and H. Grubbs/R&D/Chemical Research Division/Sanders/Osdene

Monomers of flavor-release polymers are mixed with monomers containing polar groups and copolymerized to give a copolymer which possesses water and/or ethanol solubility. Typically the copolymerizations are carried out in bulk using free radical catalysts. Smoking compositions are treated with the polymers by spraying or by incorporating in reconstituted tobacco.

Hutcheson

CODE 2

3-2-78 Disclosure received.
8-78 Discussed with inventors.
3-79 Awaiting completion of example work and smoking data.
8-79 Inventors indicate experimental work is proceeding and subjective evaluation should be completed by the end of the year.
1-24-80 Experimental work completed.

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0000049512

827 PRESSED GREEN BRIGHT TOBACCO LEAVES

G. Bokelman/R&D/Tobacco Materials Development Division/Burns/Gannon

Fresh green tobacco leaves are placed between 2 belts and run between 2 metal rollers. The expressed juices are collected for further processing before being reapplied to the pressed leaves. The stems are completely flattened by this process but are not shredded. Advantages: (1) the protoplasmic juices are removed from green tobacco leaves without homogenization; (2) this process provides great flexibility for controlling the chemical composition of the tobacco; (3) the expressed juices can be processed to selectively remove soluble protein, potassium nitrate, phenols, chlorophyll, nicotine, strach, free amino acids, etc. as by-products; (4) the tobacco will not need to be threshed; (5) although tobacco treated by this process will be subjected to an artificial curing step, it will have form, color, and handling characteristics similar to conventionally cured tobaccos; (6) this process offers a potential energy savings in the removal of water from green tobacco; (7) the pressed leaves, after recombination with processed expressed juices, can be fermented in order to develop unique subjective characteristics, etc.; (8) the expressed juices, either with or without processing, can be used as a medium for fermentation to produce tobacco flavor components.

Inskeep

CODE 2

4-17-78 Disclosure received.

7-21-78 Preliminary search completed on PM data base and results reported to inventor.

3-79 Completion report being prepared by inventor.

9-79 Waiting for completion report and experimental data contained therein--should be ready by 9-15-79.

9-11-79 Search requested by outside firm.

10-15-79 Search received; completion report received from inventor.

11-19-79 Results of search under evaluation; report to be written.

1-25-80 Assigned to Inskeep.

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0000049513

829 ON-LINE QUANTITATION OF PLASTICIZER IN FILTER RODS

D. Watson and W. Harvey/R&D/Analytical Division/Bourlas/Osdene

The device would provide for measurement of absorbed energy at selected microwave frequencies as this energy is directed through the filter rods on a maker. These measurements, once calibrated against plasticizer content of the filter material, would be used through a feed-back circuit to control the amount of plasticizer added.

Related to 877.

Sarofeen
CODE 4

4-24-78 Disclosure received.

8-18-78 This device functions similarly to very close art in-house and in a prior art reference. Under advisement pending further development.

1-80 This case will be reevaluated in view of Steinbrecher case which should be filed soon.

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834 IMPROVED FLAVOR FOR RECONSTITUTED TOBACCO

D. Keel/R&D/Flavor Development Division/Daylor/Gannon

In the manufacture of reconstituted tobacco by the paper-made process, in which the solubles are concentrated and returned to the sheet, it was found that heating the concentrated solubles with or without additives to a temperature of about 175 degrees F for a period of about 30 to 60 minutes or less before recombination with the sheet resulted in an improved flavor of the product making it more tobacco-like. This pasteurization process results in a darker colored sheet, more desirable flavor, and prevents souring or solidifying of the concentrated solubles or viscosity build-up before recombination.

Hutcheson
CODE 2

5-17-78 Disclosure received.

Close art in US 720830 to Marsden who heats tobacco extract to 250 degrees C or higher.

7-17-79 Art sent to inventor--examples requested.

8-23-79 Asked inventor to organize presently available data and examples for evaluation.

11-20-79 Discussed with inventor and he hopes to submit representative examples in the next month.

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0000049514

835 IMPROVED FLAVOR FOR RECONSTITUTED TOBACCO

D. Keel/R&D/Flavor Development Division/Daylor/Gannon

In the manufacture of reconstituted tobacco by the paper-made process, in which the solubles are concentrated and returned to the sheet, it was found that the addition of ammonia to the solubles either with or without heat and/or with or without other additives before recombination with the sheet resulted in an improved flavor of the product making it more tobacco-like.

Related to 834.

Hutcheson

CODE 2

5-17-77 Disclosure recieved.

11-7-77 Search requested.

11-22-77 Search completed.

7-17-79 Art sent to inventor--examples requested.

8-23-79 Asked inventor to organize presently available data and examples for evaluation.

11-10-79 Discussed with inventor and requested experimental and smoking data.

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836 BONDING OF POLYPROPYLENE WRAP TO ITSELF BY LASER IRRADIATION

W. Farone, A. Lilly, Jr., P. Martin, and W. Claflin/R&D/Applied Research/Physical Research Division/Kassman/Lowitz/Farone

Techniques for bonding two sheets together at high speed using focussed (2 focal length) CO₂ laser beam. Bonded area around 0.008 diameter. with reflecting foil beneath the wraps speed for bonding was 590 feet/minute with 40-60 watts power.

Sarofeen

CODE 1

5-23-78 Disclosure received.

7-12-78 Search requested from outside firm.

7-28-78 Search received--sent to Farone for evaluation.
Final disclosure details expected following testing.

11-1-78 Meeting with Farone et al--special laser has to be ordered.

8-79 Testing now in progress.

11-19-79 Laser has been received and testing is active.

1-24-80 Memo to Farone indicating that work is progressive.

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0000049515

839 IMPROVEMENTS RELATED TO SMOKING ARTICLES

C. Kounnas/R&D/Flavor Development Division/Daylor/Gannon

Cooling compounds added to rod paper for even delivery thereof.

The following are nonconfidential and not subject to UNR 15-01000, 15-01001, 15-01002, 15-01003, 15-01004, 15-01005, 15-01006, 15-01007, 15-01008, 15-01009, 15-01010, 15-01011, 15-01012, 15-01013, 15-01014, 15-01015, 15-01016, 15-01017, 15-01018, 15-01019, 15-01020, 15-01021, 15-01022, 15-01023, 15-01024, 15-01025, 15-01026, 15-01027, 15-01028, 15-01029, 15-01030, 15-01031, 15-01032, 15-01033, 15-01034, 15-01035, 15-01036, 15-01037, 15-01038, 15-01039, 15-01040, 15-01041, 15-01042, 15-01043, 15-01044, 15-01045, 15-01046, 15-01047, 15-01048, 15-01049, 15-01050, 15-01051, 15-01052, 15-01053, 15-01054, 15-01055, 15-01056, 15-01057, 15-01058, 15-01059, 15-01060, 15-01061, 15-01062, 15-01063, 15-01064, 15-01065, 15-01066, 15-01067, 15-01068, 15-01069, 15-01070, 15-01071, 15-01072, 15-01073, 15-01074, 15-01075, 15-01076, 15-01077, 15-01078, 15-01079, 15-01080, 15-01081, 15-01082, 15-01083, 15-01084, 15-01085, 15-01086, 15-01087, 15-01088, 15-01089, 15-01090, 15-01091, 15-01092, 15-01093, 15-01094, 15-01095, 15-01096, 15-01097, 15-01098, 15-01099, 15-01100, 15-01101, 15-01102, 15-01103, 15-01104, 15-01105, 15-01106, 15-01107, 15-01108, 15-01109, 15-01110, 15-01111, 15-01112, 15-01113, 15-01114, 15-01115, 15-01116, 15-01117, 15-01118, 15-01119, 15-01120, 15-01121, 15-01122, 15-01123, 15-01124, 15-01125, 15-01126, 15-01127, 15-01128, 15-01129, 15-01130, 15-01131, 15-01132, 15-01133, 15-01134, 15-01135, 15-01136, 15-01137, 15-01138, 15-01139, 15-01140, 15-01141, 15-01142, 15-01143, 15-01144, 15-01145, 15-01146, 15-01147, 15-01148, 15-01149, 15-01150, 15-01151, 15-01152, 15-01153, 15-01154, 15-01155, 15-01156, 15-01157, 15-01158, 15-01159, 15-01160, 15-01161, 15-01162, 15-01163, 15-01164, 15-01165, 15-01166, 15-01167, 15-01168, 15-01169, 15-01170, 15-01171, 15-01172, 15-01173, 15-01174, 15-01175, 15-01176, 15-01177, 15-01178, 15-01179, 15-01180, 15-01181, 15-01182, 15-01183, 15-01184, 15-01185, 15-01186, 15-01187, 15-01188, 15-01189, 15-01190, 15-01191, 15-01192, 15-01193, 15-01194, 15-01195, 15-01196, 15-01197, 15-01198, 15-01199, 15-01200, 15-01201, 15-01202, 15-01203, 15-01204, 15-01205, 15-01206, 15-01207, 15-01208, 15-01209, 15-01210, 15-01211, 15-01212, 15-01213, 15-01214, 15-01215, 15-01216, 15-01217, 15-01218, 15-01219, 15-01220, 15-01221, 15-01222, 15-01223, 15-01224, 15-01225, 15-01226, 15-01227, 15-01228, 15-01229, 15-01230, 15-01231, 15-01232, 15-01233, 15-01234, 15-01235, 15-01236, 15-01237, 15-01238, 15-01239, 15-01240, 15-01241, 15-01242, 15-01243, 15-01244, 15-01245, 15-01246, 15-01247, 15-01248, 15-01249, 15-01250, 15-01251, 15-01252, 15-01253, 15-01254, 15-01255, 15-01256, 15-01257, 15-01258, 15-01259, 15-01260, 15-01261, 15-01262, 15-01263, 15-01264, 15-01265, 15-01266, 15-01267, 15-01268, 15-01269, 15-01270, 15-01271, 15-01272, 15-01273, 15-01274, 15-01275, 15-01276, 15-01277, 15-01278, 15-01279, 15-01280, 15-01281, 15-01282, 15-01283, 15-01284, 15-01285, 15-01286, 15-01287, 15-01288, 15-01289, 15-01290, 15-01291, 15-01292, 15-01293, 15-01294, 15-01295, 15-01296, 15-01297, 15-01298, 15-01299, 15-01300, 15-01301, 15-01302, 15-01303, 15-01304, 15-01305, 15-01306, 15-01307, 15-01308, 15-01309, 15-01310, 15-01311, 15-01312, 15-01313, 15-01314, 15-01315, 15-01316, 15-01317, 15-01318, 15-01319, 15-01320, 15-01321, 15-01322, 15-01323, 15-01324, 15-01325, 15-01326, 15-01327, 15-01328, 15-01329, 15-01330, 15-01331, 15-01332, 15-01333, 15-01334, 15-01335, 15-01336, 15-01337, 15-01338, 15-01339, 15-01340, 15-01341, 15-01342, 15-01343, 15-01344, 15-01345, 15-01346, 15-01347, 15-01348, 15-01349, 15-01350, 15-01351, 15-01352, 15-01353, 15-01354, 15-01355, 15-01356, 15-01357, 15-01358, 15-01359, 15-01360, 15-01361, 15-01362, 15-01363, 15-01364, 15-01365, 15-01366, 15-01367, 15-01368, 15-01369, 15-01370, 15-01371, 15-01372, 15-01373, 15-01374, 15-01375, 15-01376, 15-01377, 15-01378, 15-01379, 15-01380, 15-01381, 15-01382, 15-01383, 15-01384, 15-01385, 15-01386, 15-01387, 15-01388, 15-01389, 15-01390, 15-01391, 15-01392, 15-01393, 15-01394, 15-01395, 15-01396, 15-01397, 15-01398, 15-01399, 15-01400, 15-01401, 15-01402, 15-01403, 15-01404, 15-01405, 15-01406, 15-01407, 15

Hutcheson 27th Nov 1976 to the Computer and the Network (1976) 100 pp. 10s

INACTIVE CODE 3

6-13-78 Disclosure received.

5-14-79 Extensive patent search underway.

5-79 Analytical and subjective material received.

6-1-79 Report to inventor.

7-79 Disclosure discussed in general with H. Kothe--no decision reached at this time.

11-20-79 Sent experimental data to H. Kothe to evaluate.

1-15-80 Inactivated in view of study done by Hutcheson and WLKT.

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840 METHOD FOR REDUCING CO DELIVERY IN NONFILTERED CIGARETTES

R. Ikeda/R&D/Flavor Development Division/Daylor/Gannon

Cigarettes are made with a fluted plastic filter on which the CA section is blocked so that smoke must pass in the flutes next to the cigarette paper allowing better possible diffusion of CO out of the cigarette paper. Reduction of 15% CO delivery was observed when compared with regular commander cigarette in which 45 mm of tobacco were smoked in both cigarettes. May also be applied to filtered cigarettes.

Sarofeen

CODE 4

6-23-78 Disclosure received.

Awaiting tests by inventor to develop method.
Close art.

New disclosure to be submitted by Ikeda and Houck.

8-30-79 Talked with Houck--project still alive but the way to go with the construction is still being determined.

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000049516

844 PROCESS FOR CHEMICALLY PULPING TOBACCO MATERIALS FOR SHEET MAKING

A. Keller and G. Bokelman/R&D/Tobacco Materials Development Division/
Burns/Gannon

Burley stems are extracted with water, then subjected to a short period of reflux in about 25% aqueous potassium hydroxide solution. The stems are next washed and subsequently treated with steam at about 115 psi and 167 degrees C for a few minutes. The stems may then be adequately defibrilated merely by gentle stirring; i.e., without any mechanical refining. Long, thin fibers, which cannot be made by mechanical refining are produced by this invention.

Hutcheson

INACTIVE 8-1-78
8-11-78 Preliminary search results sent to inventors.
3-79 Comparative studies underway.
11-19-79 Results in Annual Report are being assessed to determine whether to proceed with application.
1-25-80 Inactivated due to close prior art.

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847 METHOD FOR APPLYING POWDERS TO TOBACCO

W. Nichols/R&D/New Cigarette Products Division/Meyer/Gannon

Method for applying powdery materials to tobacco during making. directs an airstream conveying powdery material to a point of application that will produce a minimum loss of material.

Blish

CODE 2

9-14-79 Disclosure received.
1-79 Needs to be discussed with inventor.
11-79 Assigned to Blish.
1-8-80 Search requested from outside firm.

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0000049517

849 POLYMERS FOR IMPROVING FLAVOR AND AROMA OF SMOKE

H. Grubbs, T. Van Auken, and W. Johnson, Jr./R&D/Chemical Research Division
/Sanders/Osdene/Physical Research Division/Kassman/Lowitz/Farone

Polymers of unsaturated aliphatic, aromatic carbonates can be prepared in ways similar to the preparations of unsaturated aliphatic, aliphatic carbonates as disclosed in 687. These polymers, when added to cigarette filler, on smoking liberate phenolics to the smoke stream, which improve the flavor and aroma of the smoke.

Spin-off of 687.

Hutcheson

CODE 3

9-29-78 Disclosure received.

11-6-78 Examples being prepared; synthetic process under development.

9-4-79 Subjective smoking results to be generated to complete project.

1-24-80 Subjective smoking results not yet available.

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850 POLYMERS OF NICOTINE AND NICOTINE ANALOGUES

W. Johnson, Jr./R&D/Chemical Research Division/Sanders/Osdene

Polymers of nicotine analogues and of nicotine itself, which possess carbonate or ester linkages, are to be prepared from suitable substituted nicotines via condensation reactions. The polymers would consist of nicotine moieties, moieties of substituted nicotines joined by ester linkages or of nicotinic esters that have been condensed with appropriate diols, which may or may not be nicotinic in character but which in combustion and/or pyrolysis will yield nicotine and products that do not adversely affect cigarette smoke.

Hutcheson

CODE 4

9-29-78 Disclosure received.

11-6-78 Search completed--to inventor for review.
Awaiting more definitive information and examples.

9-4-79 Project in preliminary stage.

1-25-80 No experimental data available.

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0000049518

851 SOLANESOL ANALOGUES AND ESTERS THEREOF FOR APPLICATION TO CIGARETTE FILLER

W. Johnson, Jr., H. Grubbs, and G. Chan/R&D/Chemical Research Division/
Sanders/Osdene

Solanesol analogues and esters thereof are to be applied to cigarette filler and smoked. Improved subjective reponse should result. The efficacy should optimize in those cigarettes whose tar deliveries are low, i.e., below 9-10 mg when smoked by standard machine methods.

Hutcheson

CODE 4

9-29-78 Disclosure received.

3-79 Methods for preparing compounds being developed.

9-4-79 Project in preliminary stage.

1-25-80 Experimentation to make compounds still underway.

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856 ELECTRON BOMBARDMENT FOR CONTROLLING BEETLE INFESTATION

R. de la Burde/R&D/Tobacco Materials Development Division/Burns/Gannon

Related to earlier Laszlo case.

Palmer

CODE 4

10-18-78 Disclosure received.

10-20-78 Awaiting further data.

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857 LASER OPTICAL SYSTEM

E. Grollimund/Manufacturing Engineering/Pasquine

A precision lens centering and focusing structure which comprises novel features for providing precise control and stability for a laser optical system.

Sarofeen

CODE 2

11-27-78 Disclosure received.

3-79 Search to be done when indicated.

11-19-79 John Torrente is scheduled to complete the general laser search soon. This case may then be advanced for action once again.

1-24-80 General laser search is complete. Case will now be evaluated for disposition.

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0000049519

858 DISK IN FILTER TO INCREASE RESPONSE OF A LOW DELIVERY CIGARETTE

R. Hale/R&D/Flavor Development Division/Meyer/Gannon

A round disk is sealed in the center of the filter plug at the mouth end. For example, a seal is made with acetone, heat, heat and triacetin or c.a. disk glued to the exit end of the filter, or any other method of sealing the center portion of the filter plug. The seal can be at the end or through the entire filter plug. Object is to increase the response of a low delivery cigarette and to give more mouth feel, fullness and impact to the smoker.

Related to 842.

Blish

CODE 2

12-1-78 Disclosure received.

5-9-79 Inventor: wait for maker to give more definitive results.

1-24-80 No further data received at this time; assigned to Blish.

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860 NOVEL FILTER FOR DELIVERY OF MAXIMUM FLAVOR

D. Keel and W. Bell/R&D/Flavor Development Division/Daylor/Gannon

Filter that contains a tube(s), or components that fit together to form a tube(s), in a matrix of filter tow or a solid (or foam) rod by which a portion of raw, unfiltered smoke can be delivered to the mouth of the smoker with a volume of air dilutin provided by means of perforation or porosity of the tipping paper with or without flutes, bumps, or other known means.

Inskeep

CODE 2

12-1-78 Disclosure received.

5-7-79 Have only subjective data, expect analytical results soon.

12-6-79 Information received from Keel, more expected.

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0000049520

865 REDUCED DELIVERY SMOKING PRODUCT

B. Semp and D. Teng/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Microbial treatment of a tobacco extract followed by recombination with the fibrous portion of the tobacco produces a cigarette material that yields less HCN and CO. Additionally the TPM of the treated versus untreated also show reductions.

Related to 810 and 838.

Hutcheson
CODE 1

- 12-21-78 Disclosure received.
- 6-29-79 Disclosure sent to WLKT for evaluation in view of prior filings of 810 and 838.
- 7-17-79 Letter to WLKT re how to proceed.
- 9-79 Search requested from outside firm.
- 9-5-79 Development work in the pilot plant may result in additional filings in this area--no definitive data at this time.
- 10-15-79 Search received.
- 11-6-79 Discussed in depth with inventors and T. Gillis; determined that additional experimental data is necessary to define optimum limits of operation for achieving best gas phase reduction.

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866 GREEN TOBACCO LEAVES ARTIFICIALLY CURED BY ACID INCUBATION

D. Gooden and G. Bokelman/R&D/Tobacco Materials Development Division/Burns/Gannon

A process whereby green tobacco leaves are artificially cured by acid incubation. Advantages: (1) the acid incubation process gives a method to yellow pressed green tobacco from which fluids have been expressed. The yellowing removes the objectionable green color and green smoke taste or odor associated with green tobacco; and (2) acid incubation will provide leaf material with form and color similar to conventional flue-cured and burley tobacco but will not require stemming or reconstitution.

Inskeep

CODE 2 OR 4

- 1-15-79 Disclosure received.
- 3-79 Completion report being prepared by inventors.
- 8-23-79 Inventors indicate completion report almost finished.
- 9-11-79 Search requested from outside firm.
- 10-15-79 Search received; results being evaluated and report to be written.
- 10-79 Completion report received from inventor.
- 1-25-80 Assigned to Inskeep.

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0000049521

874 CO REDUCTION BY CIGARETTE ROD DESIGN

R. Jenkins/R&D/Chemical Research Division/Bourlas/Osdene

Cigarettes having a central core placed along the axis of the rod have been prepared, and on smoking the delivery of CO is substantially reduced. The central core may be composed of extruded tobacco, pith wood, carbon and the like. The core preferably is nonporous on the long axis and has some porosity radially.

Related to 622.

Blish/WLKT/Kothe

CODE 1

2-9-79 Disclosure received.

8-13-79 Disclosure sent to Kothe to determine whether an application should be prepared.

10-12-79 Letter to Kothe asking for status.

11-79 H. Kothe advised that preparation of an application not be pursued at this time.

1-80 Discussed again with Kothe in view of 622 allowance; will pursue details with inventor.

1-25-80 Assigned to Blish.

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875 RECONSTITUTED TOBACCO SHEET

R. Uhl and G. Gellatly/R&D/Tobacco Materials Development Division/Burns/Gannon

A process for producing a reconstituted tobacco sheet by wet forming on a paper making device except that a high bulk sheet is obtained by eliminating sheet compression due to mechanical pressing to remove water and by eliminating sheet ironing due to drying on a heated cylinder.

Inskeep

CODE 2

2-14-79 Disclosure received.

8-9-79 Identical disclosure 889 combined herewith.

11-27-79 Progress report being written.

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0000049522

876 HIGH BULK TOBACCO SHEET

R. Uhl and G. Gellatly/R&D/Tobacco Materials Development Division/Burns/Gannon

Production of a high bulk tobacco sheet by dry-forming means. Dry in this context is relative and can be considered to mean a considerably lower moisture than is normally present in a sheet exiting a paper making forming device.

Inskeep
INACTIVE CODE 2

2-15-79 Disclosure received.

7-23-79 Search performed in our files. Inventors wish to reduce to practice before continuing.

8-9-79 Identical disclosure 890 combined herewith.

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879 PRODUCTION AND USE OF REACTION FLAVORS FROM YEAST HYDROLYSATE AND SUGARS

B. Semp, L. Wu, and J. Swain/R&D/Flavor Development Division/Gannon/Daylor/Biomaterials Science Group/Lowitz/O'Donohue/Farone

Reaction flavors for smoking products are disclosed. The flavors are prepared by reacting reducing sugars and selected hydrolysates of single-cell protein optionally in the presence of an aldehyde in an essentially solvent-free system. The thus prepared flavors may be incorporated into smoking compositions including tobacco, reconstituted tobacco, non-tobacco substitutes or mixtures thereof.

Hutcheson
CODE 2

3-20-79 Disclosure received.

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880 USE OF B-DIKETONES TO FORM DIHYDROPYRIDINES AND PYRIDINES

F. DeBardeleben/R&D/Chemical Research Division/Sanders/Osdene

Pyridines and dihydropyridines are synthesized from B-diketones. For example, reaction of acetylacetone with ethyl B-amino crotonate would generate 2,4,6-triethyl nicotinic acid and 2,4,6-trimethyl nicotines.

Hutcheson
CODE 4

3-23-79 Disclosure received.

9-20-79 Search by TPI requested. TPI awaiting input from Dr. DeBardeleben before search is conducted.

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882 USE OF TRANS 2-PENTENAL TO GENERATE THE PYRIDINE RING

F. DeBardeleben/R&D/Chemical Research Division/Sanders/Osdene

Synthetic routes for preparing nicotine analogues are disclosed wherein the pyridine ring is generated by reacting trans 2-pentenal with, for example, 3-amino crotonate. Various 2,4-dialkyl-nicotines may be prepared.

Hutcheson

CODE 4

3-23-79 Disclosure received.

9-20-79 Search by TPI requested. TPI awaiting input from Dr. DeBardeleben before search is conducted.

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885 APPLICATION OF TOBACCO ADDITIVES TO CIGARETTE WRAPPERS

J. Seeman and H. Spielberg/R&D/Chemical Research Division/Sanders/Osdene/
Flavor Development/Daylor/Gannon

The proposal is to incorporate the additive to the cigarette paper, either by passing the paper through a solution of the additive(s) in a easily removable solvent or by incorporating the additive to the paper matrix during the paper manufacture.

Hutcheson

INACTIVE

CODE 2

4-4-79 Disclosure received.

3-79 Preliminary search completed.

1-25-80 Inactivated on basis of prior art.

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888 DEVICE FOR THE MODIFICATION OF THE RATE OF DELIVERY OF TOBACCO SMOKE COMPONENTS

G. Forrest and G. Vilcins/R&D/Analytical Division/Bourlas/Osdene

Device for the modification of the rate of delivery of tobacco smoke components based on the transient retention of the component by the device. Retention must be on the order of the time between puffs.

Blish

4-24-79 Disclosure received.

11-79 Assigned to Blish.

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0000049524

891 QUANTITATIVE COLLECTION SYSTEM FOR SIDESTREAM CIGARETTE SMOKE

W. Morgan and J. Nienow/R&D/Analytical Division/Bourlas/Osdene

A quantitative collection system for collecting sidestream smoke which consists of a chimney style hood. The cigarette is mounted through a hole in the bottom side wall of the hood. Separate air supplies are provided and negative pressure is maintained at the top of the chimney. A shroud of reduced diameter surrounds the coal. The arrangement eliminates smoke condensation and guarantees that all smoke engendered will proceed to a smoke trap.

INACTIVE

Blish Deleted search is OK
CODE 4
5-2-79 Disclosure received.
11-79 Assigned to Blish.
12-14-79 Search requested from K&S.
1-2-80 Search received.
1-22-80 Inactivated because of prior art.

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0000049525

892 LASER DISCLOSURES

S. Spiers, W. Smick, D. Brookman, E. Grollimund/Manufacturing Engineering/
Pasquine

A compilation of ideas from several cooperating individuals which, in composite, result in a bobbin feed and driving method which makes high perforating speeds possible on a laser perforating machine. The ideas in this file will be separated into individual cases or be combined or joined in other disclosures for bobbin drives.

Sarofeen
CODE 2

5-2-79

Disclosures received.

8-23-79

This group of disclosures was filed under the generic number PM 892 and had for a purpose to make an interim record of improvements in Malaucene paper perforating accessory equipment prior to possible viewing during a visit by a Malaucene technologist. Only enough of a description is included to establish a priority of conception, and this generic PM number 892 will be later phased out as separate disclosures are made of the several items included in this folder. These disclosures were passed on to WLK&T in due course in the abbreviated form in which written and a meeting was scheduled for George Brandt to visit and inspect these disclosures and the installation comprising the inventions. After completion of the visit by Malaucene's technologist which took place during the period of from afternoon of May 7 and left afternoon of May 11, 1979, George Brandt after preliminary discussions with Art Palmer and Howard Kothe, visited on August 8 and 9 and inspected the installations and talked with the inventors involved. His evaluation resulted in a highlighting of those features which in his opinion might be patentable. He plans to write up one or more cases around these disclosures. In the meantime more detailed disclosure letters have been received describing further some of the more substantial features previously outlined in the above disclosures. Now, referring to the cover sheet in this folder listing disclosures 1 through 11, the status is as follows: (1) Grollimund - large windup drum and paper path change: this is now incorporated in PM 900 and 911; (2) This listed item is not found in the group of sheets in this folder, but has already been filed upon in the name of Ed Stultz as inventor in a separate case; (3) Not acted on as yet; (4) Not acted on as yet; (5) Not acted on as yet; (6) Ev Grollimund is modifying and expanding the technique of alignment talked about herein and may submit another disclosure; (7) Not acted on as yet; (8) Not acted on as yet; (9) Not acted on as yet; (10) Not acted on as yet; and (11) Not acted on as yet. I expect to confer with George Brandt to get his judgement on how the cases marked "not yet acted on" above should be categorized.

1-24-80

Discussions with Brandt lead to a conclusion that the 11 disclosures listed above will result in filing 4 cases. These will be advanced as time permits.

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894 USE OF PIPERAZINES AS FLAVORANTS AND/OR COOLING COMPOUNDS

W. Edwards and Y. Houminer/R&D/Chemical Research Division/Sanders/Osdene

Tobacco flavorant and/or cooling compounds selected from 1,4-disubstituted pyrazines and alkylpiperazines wherein the 1,4-substituents are acyl, sulfonyl and carbamido are disclosed.

Hutcheson

CODE 4

5-7-79 Disclosure received.

11-20-79 Experimental and synthesis work completed; analytical smoking data will be obtained in the near future.

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895 1,2- AND 1,4-DIHYDROPYRAZINES (I, II) AS FLAVORANTS AND/OR COOLING COMPOUNDS

W. Edwards and Y. Houminer/R&D/Chemical Research Division/Sanders/Osdene

Tobacco flavorant and/or cooling compounds selected from 1-substituted-1,2-dihydropyrazines and 1,4-disubstituted dihydropyrazines wherein the 1- and 4-substituents are acyl, sulfonyl and carbamido.

Hutcheson

CODE 4

5-7-79 Disclosure received.

11-20-79 No experimental or synthesis data available at this time.

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896 FLAVOR-RELEASE AGENTS ON TOBACCO

W. Johnson, Jr. and H. Grubbs/R&D/Chemical Research Division/Sanders/Osdene

Polymeric sulfur release flavorant compounds are disclosed as being useful in smoking products. Processes for their preparation and use on tobacco are detailed.

Hutcheson

CODE 4

5-8-79 Disclosure received.

9-5-79 Preliminary synthesis work underway.

1-24-80 Synthetic work completed; subjectives to be done in near future.

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0000049527

897 SYNTHESIZING PYROLYTIC PRECURSORS TO PRODUCE ALDEHYDIC-TYPE FLAVORANTS

M. Bourlas and H. Grubbs/R&D/Chemical Research Division/Osdene/Sanders/
Analytical Division/Osdene/Bourlas

Polymeric flavorants release compounds having controlled thermal decomposition properties producing aldehydic-type flavorants on combustion are disclosed. Prior to smoking, the compounds are non-volatile and non-migratory.

Hutcheson

CODE 2

5-7-79 Disclosure received--lacks detail.

9-4-79 Preliminary synthesis of monomers underway.

1-25-80 Examples prepared for subjective evaluation.

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898 COMPOUNDS CONTAINING THE BASIC ELEMENTS OF THE NICOTINE MOLECULE

W. Edwards and J. DeBardeleben/R&D/Chemical Research Division/Sanders/
Osdene

Nicotine analog with fixed geometry through attachment of the N-methyl to the 2-position of the pyridine ring. Alkylated or arylated equivalents.

Inskeep

CODE 4

5-10-79 Disclosure received.

9-79 Progress will be reported by inventors.

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899 METHYL-PYRIDO-AZABICYCLO-OCTANE AND ALKYL-SUBSTITUTED ANALOGUES

J. Seeman and C. Chavdarian/R&D/Chemical Research Division/Sanders/Osdene

Nicotine analog with fixed geometry through methylene bridging from 5' to 2. Alkylated homologs.

Related to 893.

Inskeep

CODE 4

5-15-79 Disclosure received

11-20- Awaiting hopefully more promising test results.

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0000049528

902 MEASURING PRESSURE DROP

D. Brookman/Manufacturing Engineering/Pasquine

A strip of cigarette tipping paper after being perforated is guided over a pressurized port of prescribed area. A positive air pressure is maintained at said port to be available to bleed through the holes in the tipping paper. The pressure drop is measured across the paper to determine the degree of porosity attained.

Related to earlier Stultz case.

Sarofeen

CODE 2

5-17-79 Disclosure received.

9-19-79 This case is similar to Ed Stultz' case, now pending, which differs only in the use of positive air pressure as against Stultz' use of negative air pressure. This case is being held in abeyance pending first Office Action on the Stultz case.

* * * * *

905 REORDERING OF DIET

C. Hoelzel/R&D/Biomaterials Science Group/Lowitz/O'Donohue/Farone

A method of reordering expanded tobacco wherein fully reordered tobacco is mixed with freshly expanded tobacco prior to entering the reordering cylinder. From the reordering cylinder the mixture is sent to a bulking silo (first in-first out type) from which a portion is removed at the exit for use in the "fully reordered" tobacco mentioned above.

Inskeep

CODE 1

3-21-79 Disclosure received.

6-79 Preliminary search completed--sent to inventor for review.

6-22-79 Inventor's comments received.

7-2-79 Discussed with Farone--awaiting test results.

1-23-80 Considering disposition: Hoelzel.

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0000049529

909 QUALITY CONTROL METHOD

R. Creamer/Chemical Research Division/Kassman/Lowitz/Farone

Light absorption, rather than more usual scattering, is applied to smoke aerosol to study variations within a puff or from puff to puff.

Blish

7-22-79 Disclosure received.

7-23-79 Sent to Osdene/Johnson for recommendations/comments.

11-27-79 Sent to Sanders for comment; in-house search completed.

1-4-80 Sent to Kassman for comment.

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910 COOLING VACUUM PUMPS BY AIR FLOW

E. Grollmund/Manufacturing Engineering/Pasquine

A system for maintaining laser vacuum pump temperature levels within safe operating limits to allow for elimination of down time due to pump overheating. Also increases pump life and contributes to more even power output from laser.

Sarofeen

8-6-79 Disclosure received.

11-19-79 This disclosure was made for record purposes in view of disclosure to the supplier of the laser unit.

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912 COMPOUND CONTAINING BASIC NICOTINE ELEMENTS

W. Edwards and J. DeBardeleben/R&D/Chemical Research Division/Sanders/Osdene

Nicotine analog with fixed geometry through C₁-C₃ alkylene bridging from 2' to 2 or 4. Alkylated or arylated equivalents.

Related to 898.

Inskeep

INACTIVE CODE 4

7-31-79 Disclosure received--inventors notified.

9-79 Progress will be reported by inventors.

12-28-79 Discussed with both inventors--mark inactive until further notice.

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0000049530

915 MEANS FOR REDUCING SPHERICAL ABERRATION IN A LENS

D. Lowitz/R&D/Applied Research/Farone

This is directed to facilitate micro images with a CO2 laser perforator which produces an invisible beam, or to generally focus invisible beam laser. When using a lens to focus a laser beam, a second or additional element may be provided that is essentially a lens element in its basic construction, but which does not have any center portion. Because lens elements of a finite size and thickness normally introduce spherical aberration, such an additional element that does not have a center region of material can be used together with the primary lens element to modify the effective focal length of the outer portion of the primary lens and to make it equal to the center portion of the primary lens, and thereby eliminate spherical aberration and permit focusing to a spot.

Sarofeen

8-27-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Sarofeen.

11-20-79 Inventor is preparing technical data.

1-24-80 No further material received to date.

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916 CIGARETTE FILTER

J. Lephardt/R&D/Analytical Division/Bourlas/Osdene

A ventilated filter with tow compressed toward axis at the zone of ventilation to disperse smoke better across the filter.

Inskeep

CODE 1

8-28-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Inskeep.

9-20-79 PM data base search completed.

1-24-80 No work contemplated.

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0000049531

917 CIGARETTE FILTER

J. Lephardt/R&D/Analytical Division/Bourlas/Osdene

A ventilated plug-space-plug filter wherein the space contains a conical baffle and is positioned at the ventilation zone. Air-smoke mixing is favored.

Inskeep

CODE 1

8-28-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Inskeep.

9-20-79 PM data base search completed.

1-24-80 No work contemplated.

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918 INERTIAL FRICTION DRIVE CONVEYOR CHAIN SYSTEM

M. Slovic/Stemmery

A system for conveying palleted or flat sided materials such as load containing boxes. The basic component is a roller or slide chain comprising a top mounted roller in an upwardly projecting lug. The chain is driven preferably in a channel guide. The load bearing upwardly projective lugs receive the load on a lug mounted roller. the weight of the load pressing against the upper rollers causes it to move with the chain supported on the rollers. An impediment to the movement of the load such as a stop at the end of desired travel causes the chain to underide the stopped portion of the load while continuing to advance other portions of load along the chain lengths.

Sarofeen

8-29-79 Disclosure received--inventor notified.

9-5-79 Disclosure assigned to Sarofeen.

9-12-79 Search requested from outside firm.

10-8-79 Search received--sent to inventor for review.

11-20-79 Search results show very close art.

1-24-80 Due to be inactivated.

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0000049532

922 HIGH STRENGTH RECONSTITUTED TOBACCO SHEET WITHOUT NONTOBACCO ADDITIVES

G. Gellatly, J. Baggett, G. Wilkinson, G. Jenkins/R&D/Tobacco Materials Development Division/Burns/Gannon

Simple sheet making process to minimize processing steps and capital expenditure. Tobacco materials are pressurized with steam for about 1 hour and the pressure released rapidly. This disintegrates the structure of the tobacco to a paste. This paste can then be cast into a sheet or formed by paper making techniques into a sheet of superior strength to other known processes.

Inskeep

10-79 Disclosure received - inventor notified.

11-79 Assigned to Inskeep.

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925 NWA IMPROVEMENTS

W. Nichols/R&D/New Products Division/Meyer/Gannon

Sarofeen

9-14-79 Disclosure logged in - inventor notified.

1-24-80 One case (PM 914, Gergely) based on these improvements has been filed.

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926 CHEMICAL STRUCTURES WHICH FACILITATE TRANSPORT OF MATERIALS ACROSS BILAYERS

J. Lephardt/R&D/Analytical Division/Osdene/Bourlas

Inskeep

9-26-79 Disclosure received - inventor notified.

10-31-79 Assigned to Inskeep.

1-10-80 Search requested from outside firm.

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0000049533

927 FILTER

H. Maxwell/R&D/Flavor Development Division/Daylor/Gannon

Filters were made using triethyl citrate (TEC) as plasticizer. TEC was applied at 2.5, 5.0, 7.5, and 10% of filter tow weight. Control filters were made with 10% triacetin plasticizer. The filters were attached to mentholated cigarette rods and subjected to aging study.

Inskeep

10-16-79 Disclosure received - inventor notified.

11-79 Assigned to Inskeep.

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928 PREPARATION OF N-TERT BUTYL-p-MENTHANE-3-CARBOXAMIDE (WS-14)

R. Comes and S. Haut/R&D/Chemical Research Division/Bourlas/Sanders/Osdene

A one step synthesis from menthyl chloride leading to a pure WS-14 in a shorter period of time with a comparable yield.

Hutcheson

10-22-79 Disclosure received - inventor notified.

10-31-79 Assigned to Hutcheson.

11-9-79 Search conducted by TIF in 1978 sent to inventors for evaluation.

1-25-80 Awaiting information from possible inventor Van Auken.

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930 DIGITAL DRY WEIGHT COMPUTER AND SENSOR CALIBRATOR

D. Phan, W. Sweeney, and J. Nghiem/Manufacturing Engineering/Taylor/Pasquine

Blish

10-31-79 Disclosure received - inventors notified.

12-79 Assigned to Blish.

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932 RESOLUTION OF RACEMIC MENTHOL

S. Haut/R&D/Chemical Research Division/Sanders/Osdene

Inskeep

10-31-79 Disclosure received - inventor notified.

1-21-80 Assigned to Inskeep.

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0000049534

933 SPIRAL-WOUND PACKED BED REACTOR

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

The invention involved a spiral-wound packed bed reactor consisting of a tube containing a flexible foam which may be smooth or contain indentions. On this foam are adhered segmented packets of encapsulated microorganisms which perform specific bio-chemical reactions. The encapsulated cells are segmented to facilitate and control flow rates and prevent compaction.

Hutcheson

11-2-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.

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934 TOBACCO BEETLE CONTROL

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

The invention is a process to kill the symbiotic yeast in tobacco beetles and indirectly kill the larvaes and eggs that the adult beetle might deposit. In this method the tobacco can be sprayed with phosphoric acid to lower the pH. Alternatively, the container in which the tobacco will be stored for maturation can be dipped in phosphoric acid or it could be sprayed with the strong acid before the tobacco is pressed into it. As tobacco or container dries, the pH is further lowered making it impossible for the symbiotic yeast to survive.

Inskeep

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Inskeep.

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0000049535

935 MATERIALS AND METHOD FOR THE MANUFACTURE OF PELLETS (PI)

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets, the cell or enzyme solution is reacted with celite 545 (filter aid), glutaraldehyde, and polyethyleneimine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Hutcheson

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.

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936 MATERIALS AND METHOD FOR THE MANUFACTURE OF PELLETS (PI)

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets, the cell or enzyme solution is reacted with celite 545 (filter aid), POLY(acrylamide acrylic acid) saturated in ethanol, and polyethylene imine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Hutcheson

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.

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0000049536

937 SAPONIFIED UNSATURATED FATTY ACIDS

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

The invention is a method for producing pellets containing live microbial cells or active enzymes. To make the pellets the cell or enzyme solution is reacted with celite 545 (filter aid); saponified unsaturated fatty acids i.e. sodium oleate, linoleic acid, linoleic acid, Joy liquid soap, White Dove liquid soap, etc. and polyethyleneimine, which are added sequentially. The end product consists of highly permeable pellets in which the protein on the outer wall of the microorganism or on the enzyme has reacted with the polymeric ingredients added.

Hutcheson

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

1-8-80 Discussed with inventor and manager. Must investigate prior art before processing.

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938 PROTEIN PRECIPITATION ON SEL

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

A process to remove some of the protienaceous components of SEL (tobacco juice). In this method the pH is raised from 5.5 to 8 to insolubilize protein precipitation at its isoelectric pH (least soluble pH of protein). Using 2N KOH to raise the pH, the insoluble solids were increased from 7.73 grams up to 22.78 grams. when in addition to the pH adjustment 10.7 grams K_2HPO_4 /liter of SEL was added, the insoluble solids were increased from 7.73 grams up to 32.83 grams. The solids were separated by centrifugation and decanting of the supernatant. The process may consist only on adjusting the pH to alkalinity or it could involve pH adjustment plus addition of K_2HPO_4 .

Hutcheson

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

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0000049537

939 DENITRIFICATION OF SEL BY FEDBATCH FERMENTATION

H. Bravo/R&D/Biomaterials Science/O'Donohue/Lowitz/Farone

A process for denitrification of SEL using the fedbatch fermentation process. In this process the cell inoculum and some of the nutrients are introduced first into the fermentor in proportions slightly in excess to that needed to denitrify a full vessel of SEL. The tobacco juice (SEL which has been adjusted to pH 7.3 and autoclaved) is then continuously added at a sufficient rate to fill the fermentor in 12 hours. This process will resemble continuous and batch processes without being either of them. The application of fedbatch to denitrification is new. Fedbatch process has been primarily used in academia. Preliminary results show that fedbatch denitrification could be 1/3 as long as batch denitrification, 8 hours.

Hutcheson

11-5-79 Disclosure received - inventor notified.

12-79 Assigned to Hutcheson.

1-18-80 Prior art search undersay.

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940 FUME HOOD

R. Kelly/Q A Link

This fume hood comprises a unique ducting system which includes a base scavenging aperture which collects fume-fall vapors. Vapors of heavier than air solvents which exit the front ledge of a fume hood in a waterfall action and frontal spills which result in vapors are suctioned off at the floor level by a duct at the lower front of the hood. The lower duct is connected to the main system.

Sarofeen

11-14-79 Disclosure received - inventor notified.

12-79 Assigned to Sarofeen.

12-20-79 Search received from K&S--to inventor for review.

1-24-80 Request for recommendation of AIP for disposition.

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941 EXTRACTION AND DENITRATION OF BURLEY STRIP

S. Muller/R&D/Tobacco Materials Development Division/Burns/Gannon

Hutcheson

11-20-79 Disclosure received - inventor notified.

1-21-80 Assigned to Hutcheson; discussed with manager.

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0000049538

942 COMPOUND TO ADD TO TOBACCO TO PRODUCE NICOTINE UPON SMOKING

W. Chan/R&D/Chemical Research Division/Sanders/Osdene

Related to 703.

Inskeep

11-21-79 Disclosure received - inventor notified.

12-79 Assigned to Inskeep.

1-2-80 Copy of disclosure sent to Depaoli re PM 703.

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943 RAPID REORDERING WITH AN APRON DRYER

F. King, Jr. and P. Sherman/Manufacturing Engineering/Taylor/Pasquine

(1) Rapid reordering is accomplished by spraying a fine mist of water onto the free falling tobacco down stream from the discharge doffer. Tobacco carpet is one leaf thick at this point for free fall velocity is much greater than traveling speed on conveyor. Tobacco carpet thickness is inversely proportional to speed for a given flow rate. (2) Either front and/or back spray nozzles can be used to spray onto the falling tobacco. (3) spray nozzles are spaced across the tobacco carpet so that overlapping (double) spray is accomplished. (4) Quantity of reorder is controlled by quantity of water sprayed through nozzles. some external means to precisely control the quantity of water is employed (i.e. meter pumps, etc.). A feedback signal from a moisture meter could be employed to control the quantity of water used. (5) No fans are used to circulate moisture laden air through the tobacco. (6) Key to invention is the application of a mist at a point where the carpet is essentially one leaf thick. If a thicker carpet is employed, wetting of the top leaves will occur and result in possible mold growth or non-uniform moisture application.

Sarofeen

12-7-79 Disclosure received--inventors notified.

1-21-80 Assigned to Sarofeen.

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944 PREPARATION OF MIXED MALONATE ESTERS

E. Southwick/Chemical Research Division/Sanders/Osdene

Malonate esters useful as monomers for the preparation of flavor release agents.

Inskeep

12-12-79 Disclosure received--inventor notified.

1-21-80 Assigned to Inskeep.

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0000049539

945 FLAVOR

S. Haut, R. Comes, M. Core/Chemical Research Division/Sanders/Osdene

Compound useful as a flavor additive much like WS-14.

Inskeep

12-79 Disclosure received--inventors notified.

1-21-80 Assigned to Inskeep.

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946 AIR FLOW MEASURING DEVICE

R. Gaudlitz/Engineering Services/Mutter/Thomson

Related to PM 802, USSN 967,250

Sarofeen

1-3-80 Disclosure received--inventor notified.

1-21-80 Assigned to Sarofeen.

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947 COOLING COMPOUND

F. DeBardeleben/Chemical Research Division/Sanders/Osdene

Hutcheson

10-79 Disclosure made informally to S. Hutcheson

1-80 Disclosure logged in--inventor notified.

1-21-80 Assigned to Hutcheson; inventor working on synthesis of compounds.

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0000049540

0000049541

JAN 28 1980
T. S. OSDENE